

APPENDIX A GLOSSARY

A.1 Aggregate

Aggregate	A hard inert mineral material, such as gravel, crushed rock, slang, or sand.
Coarse Aggregate	Aggregate retained on the 2.36 mm (No. 8) sieve.
Fine Aggregate	Aggregate passing the 2.36 mm (No. 8) sieve.
Sand	Fine aggregate resulting from natural disintegration and abrasion of rock or processing of completely friable sandstone.
Dense-Graded Aggregate	Aggregate that is graded from the maximum size down through filler with the object of obtaining an asphalt mix with a controlled void content and high stability.
Open-Graded Aggregate	Aggregate containing little or no mineral filler or in which the void spaces in the compacted aggregate are relatively large and interconnected.
Sandy Soil	A material consisting essentially of fine aggregate particles smaller than 2.36 mm (No. 8) sieve and usually containing material passing a 75 μ m (No. 200) sieve. This material usually exhibits some plasticity characteristics.
Reclaimed Asphalt Pavement (RAP)	Existing asphalt mixture that has been pulverized, usually by milling, and is used like an aggregate in the recycling of asphalt pavements.

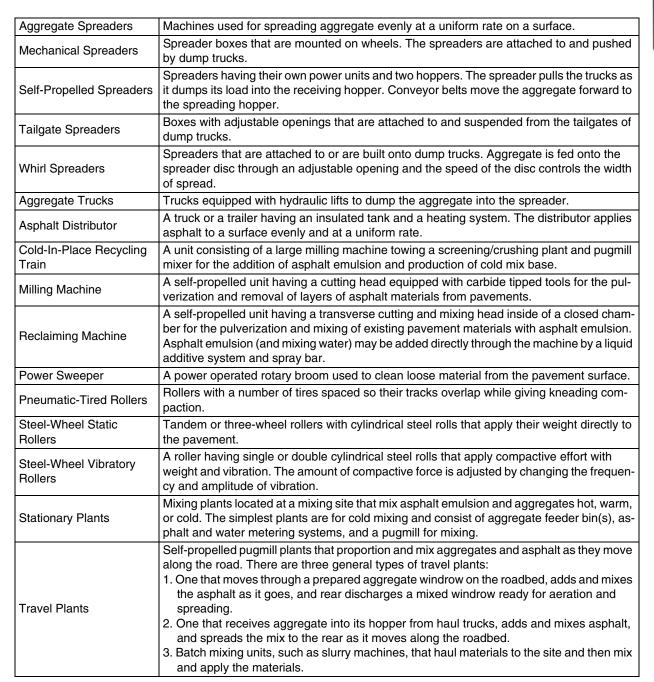
A.2 Asphalt

Asphalt	"A dark brown to black cementitious material in which the predominating constituents are bituminous which occur in nature or are obtained in petroleum processing" (ASTM D8) Asphalt is a constituent in varying proportions of most crude petroleum.
Asphalt Cement	Asphalt that is refined to meet specifications for paving, roofing, industrial, and special purposes. Heat is required to make it fluid.
Asphalt Prime Coat	An application of asphalt primer to an absorbent surface. It is used to prepare an untreated base for an asphalt surface. The prime penetrates or is mixed into the surface of the base and plugs the voids, hardens the top and helps bind it to the overlying asphalt course.
Asphalt Primer	A fluid asphalt of low viscosity (highly liquid) that penetrates into a non-bituminous surface upon application.
Asphalt Tack Coat	A very light application of asphalt emulsion diluted with water. It is used to ensure a good bond between the surface being paved and the overlying new course.
Cutback Asphalt	Asphalt cement that has been liquefied by blending with petroleum solvents.
Asphalt Emulsion	An emulsion of asphalt cement and water that contains a small amount of an emulsifying agent. Emulsified asphalt droplets may be of either the anionic (negative charge) or cationic (positive charge).

A.3 Asphalt Emulsion

Emulsifying Agent or Emulsifier	The chemical added to the water and asphalt that keeps the asphalt in stable suspension in the water. The emulsifier determines the charge of the emulsion and controls the breaking rate.
Breaking	The phenomenon when the asphalt and water in the emulsion separate, beginning the curing process. The rate of breaking is controlled primarily by the emulsifying agent.
Curing	The development of the mechanical properties of the asphalt binder. This occurs after the emulsion has broken and the emulsion particles coalesce and bond to the aggregate.
Residue	The asphalt binder that remains after the emulsion has broken and cured.

A.4 Equipment





A.5 Types of Asphalt Surface Treatments and Mixes

